

IN THE CLAIMS:

1.-39. (Canceled)

40. (Original) A method of cross-linking collagen to make digestion-resistant remodelable cross-linked collagen, the method comprising:

providing a hydrogel comprising collagen;

containing said hydrogel within a semipermeable membrane, said membrane being substantially transparent to visible light and substantially permeable to at least one photooxidative catalyst;

transporting at least one photooxidative catalyst through said semipermeable membrane and into said hydrogel; and

irradiating said hydrogel with visible light to cross-link said collagen.

41. (Original) The method of claim 40 comprising an additional step between said containing step and said transporting step, the additional step being

submerging said hydrogel-containing semipermeable membrane in a high salt:high sucrose solution for about 24 to about 72 hours.

42. (Original) The method of claim 41 wherein said hydrogel comprises nucleus pulposus tissue.

43. (Original) The method of claim 42 wherein said transporting step occurs at a substantially constant hydrogel temperature of about 10°C.

44. (Original) Digestion-resistant remodelable cross-linked collagen made by the method of claim 43.

45. (Original) The method of claim 42 wherein said hydrogel comprises substantially Type II collagen.

46. (Original) The method of claim 43 wherein said semipermeable membrane comprises dialysis tubing having a molecular weight cutoff of about 3500 Daltons.

47. (Original) The method of claim 43 wherein said transporting step and said irradiating step are substantially simultaneous.

48. (Original) The method of claim 43 wherein said transporting step occurs while said semipermeable membrane containing said hydrogel is immersed in a solution comprising at least one photooxidative catalyst.

49. (Original) The method of claim 43 comprising an additional step after said irradiating step, the additional step being

terminating said transporting step and said irradiating step when said collagen cross-linking is substantially complete.

50. (Original) The method of claim 49 comprising an additional step after said terminating step, the additional step being
extracting said cross-linked collagen from said hydrogel.

51. (Original) The method of claim 43 wherein said at least one photooxidative catalyst comprises methylene blue.

52.-59. (Canceled)